

IN THE CLAIMS:

Please amend claims 5-15, cancel claims 16-23, and add new claims 27-36.

This listing of claims will replace all prior versions, and listings of the claims in the application.

Listing of the claims

1. (Original) Biologically pure bacterial culture of at least one mutant strain of *P. fluorescens*, wherein said strain produces at least 10 g alginate per liter medium.
2. (Original) Biologically pure bacterial culture of at least one mutant strain of *P. fluorescens* of claim 1, wherein said strain produces at least 10 g alginate per 40-55 g carbon source per liter medium.
3. (Original) Biologically pure bacterial culture of at least one mutant strain of *P. fluorescens* of claim 1, wherein said strain produces at least 10 g alginate per 50-55 g carbon source per liter medium.
4. (Original) Biologically pure bacterial culture of at least one mutant strain of *P. fluorescens* of claim 1, wherein said strain produces at least 10 g alginate per 40 g carbon source per liter medium.
5. (Currently Amended) A pure ~~Pure~~ mutant strain of *P. fluorescens* ~~of claim 1,~~
~~wherein said mutant strain is~~ selected from the group consisting of the mutant strain Pf201, Pf2012, Pf2013, Pf20118, Pf20137, Pf20118algIΔ, Pf20118algFΔ, Pf20118AlgLH203R and Pf201MC.

6. (Currently amended) The pure ~~Pure~~ mutant strain of *P. fluorescens* of claim 33, ~~the claims 1~~, wherein the said mutant produces ~~is capable of producing~~ large amounts of an alginate consisting of mannuronate residues only.
7. (Currently Amended) The pure ~~Pure~~ mutant strain ~~strains~~ of *P. fluorescens* of claim 5, wherein the said mutant strain is selected from the group consisting of: ~~the variant strains~~ Pf2012, Pf2013, Pf20118, and Pf20137.
8. (Currently amended) The pure ~~Pure~~ mutant strain of *P. fluorescens* of claim 33, ~~1~~, wherein the said mutant produces ~~is capable of producing~~ alginate having a defined guluronate residue (G)-content between 0 and 30%.
9. (Currently amended) The pure ~~Pure~~ mutant strain of *P. fluorescens* of claim 33, ~~the claims 1~~, wherein the said mutant produces ~~is capable of producing~~ alginate without, or with a reduced number of O-acetyl groups.
10. (Currently amended) The pure ~~Pure~~ mutant strain of *P. fluorescens* of claim 5, wherein the said mutant strain is selected from the group consisting of: ~~the mutant variant strains~~ Pf20118alg1Δ and Pf20118algfΔ.
11. (Currently amended) The pure ~~Pure~~ mutant strain of *P. fluorescens* of claim 33, ~~claims 1~~, wherein the said mutant produces ~~is capable of producing~~ alginate with a molecular weight of between 50,000 and 3,000,000 Daltons.
12. (Currently amended) The pure ~~Pure~~ mutant strain of *P. fluorescens* of claim 5, wherein the said mutant strain is selected from the group of the variant mutant strain Pf20118AlgLH203R.

13. (Currently amended) The pure ~~Pure~~ mutant strain of *P. fluorescens* of claim 33, comprising an alginate biosynthetic operon regulated by an inducible promoter different from the naturally occurring promoter, and optionally one or more effector genes.

14. (Currently amended) The pure ~~Pure~~ mutant strain of *P. fluorescens* of claim 13, wherein the inducible promoter is a *Pm* promoter, and further comprising the effector gene *xyIS*.

15. (Currently amended) The pure ~~Pure~~ mutant strain of *P. fluorescens* of claim 5, wherein the said mutant strain is Pf201MC.

16-23. (Canceled)

24. (Withdrawn) Use of biologically pure bacterial culture of at least one mutant strain of *P. fluorescens* of claim 1, for the production of alginate.

25. (Withdrawn) Use of biologically pure bacterial culture of at least one mutant strain of *P. fluorescens* of claim 1, for the large scale fermentor-production of alginate.

26. (Withdrawn) Use of the alginate produced by at least one mutant strain of *P. fluorescens* of claim 1, in the preparation of a food or industrial product such as a pharmaceutical, cosmetic, animal feed or nutrient product, or as an intermediate product for *in vitro* C-5-epimerization.

27. (New) The biologically pure bacterial culture of at least one mutant strain of *P. fluorescens* of claim 1, wherein mutant strain comprising mutant gene selected from the group consisting: a mutant *algG* gene, a mutant *algI* gene, a mutant *algJ* gene, a mutant *algL* gene, and a mutant *algF* gene.

28. (New) The biologically pure bacterial culture of at least one mutant strain of *P. fluorescens* of claim 1, wherein said mutant strain produces large amounts of an alginate consisting of mannuronate residues only.
29. (New) The biologically pure bacterial culture of at least one mutant strain of *P. fluorescens* of claim 1, wherein said mutant strain produces alginate containing about 30% or fewer guluronic acid residues.
30. (New) The biologically pure bacterial culture of at least one mutant strain of *P. fluorescens* of claim 1, wherein said mutant strain produces alginate containing small amounts of O-acetyl groups.
31. (New) The biologically pure bacterial culture of at least one mutant strain of *P. fluorescens* of claim 1, wherein said mutant strain produces alginate with a molecular weight of between 50,000 and 3,000,000 Daltons.
32. (New) The biologically pure bacterial culture of at least one mutant strain of *P. fluorescens* of claim 1, wherein said mutant strain is selected from the group consisting of the mutant strain Pf201, Pf2012, Pf2013, Pf20118, Pf20137, Pf20118algIJA, Pf20118algFΔ, Pf20118AlgLH203R and Pf201MC.
33. (New) A pure mutant strain of *P. fluorescens* which produces at least 10 g alginate per liter medium.
34. (New) The pure mutant strain of *P. fluorescens* of claim 33, wherein said mutant strain produces at least 10 g alginate per 40-55 g carbon source per liter medium.

35. (New) The pure mutant strain of *P. fluorescens* of claim 33, wherein said mutant strain produces at least 10 g alginate per 50-55 g carbon source per liter medium.

36. (New) The pure mutant strain of *P. fluorescens* of claim 33, wherein said mutant strain produces at least 10 g alginate per 40 g carbon source per liter medium.